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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/699,565 | 10/30/2003 | Henry Dombroski | 2421.003 | 1578 |

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EXAMINER

BELLINGER, JASON R

ART UNIT PAPER NUMBER

3617

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,565

Applicant(s)

DOMBROSKI ET AL.

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Drawings

1. The drawings were received on 19 October 2004. These drawings are approved.

Claim Objections

2. Claims 10 and 12 are objected to because of the following informalities: These claims depend from cancelled claim 8. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 6 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 is indefinite due to the fact that the phrase "an annular pneumatic chamber" in line 2 is a double recitation. This limitation has been previously set forth in independent claim 1. Therefore, it is unclear whether the "annular pneumatic chamber" of claim 6 is the same as that set forth in claim 1 or an additional element of the invention.

5. Claim 11 recites the limitation "said oil seal" in lines 2-4. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in this or any preceding claim. Claim 1, from which claim 11 depends, sets forth

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the limitation of "seals" being located between a hub and axle; however the type of seals used has not been specified.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 6, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox. Fox shows a pressurized wheel hub 4 with bearings (6, 8) that are rotatably securable to an axle 2. Seals (36 & 130, also 62 & 90) are located between the hub 4 and axle 2 to form a closed air space around the bearings (6, 8). An annular pneumatic chamber 128 is coaxially disposed along the end of the axle 2, and includes an inlet 26 adapted for fluidly coupling to a source of pressurized air 28 and an outlet 44 coupled to a closed air space *T*, wherein the source of pressurized air 28 maintains the air pressure in the closed air space.

Fox does not specify that the air within the closed air space is maintained between 1 and 30 psi by the source of pressurized air. However, one of ordinary skill in the art at the time of the invention would find it obvious to maintain the air in the closed air space at a sufficient pressure to allow the chamber to remain airtight while still allowing any lubricants within the chamber to remain viscous.

Fox does not specify the type of air source utilized. However, it is well known in the art to use air compressors to provide a source of pressurized air to a sealed

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chamber. Furthermore, it is well known in the art that air compressors provided on a vehicle body may be powered by a DC energy source already on the vehicle (such as a battery, etc). It is further well known in the art to provide the air compressor on any type of vehicle, be it a trailer or a towing vehicle.

A sleeve 74, which is securable to the axle 2, is operably associated with oil seals 78. This sleeve 74 provides a machined surface to permit enhanced sealing with the oil seals 78. Fox does not disclose that the sleeve is polished. However, it is well known in the art that a polished surface has a lower coefficient of friction than a corresponding unpolished surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sleeve of Fox with a polished surface for reducing the coefficient of friction, thus allowing a more laminar flow of lubricant between the bearings, and to increase the surface area of the sleeve that contacts the oil seals, thus preventing leaks.

8. Claims 2-5, 7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox as applied to claims 1, 6, and 9-11 above, and further in view of Hunt et al. Fox does not shows a means for measuring the amount of pressurized air within the closed space. Hunt et al teaches the use of an air pressure measuring device 40 having a dial face 106 with a pressure indicating needle 104 for indicating the amount of air pressurized within a closed system. A breached seal condition would be clearly indicated by this measuring device 40. The air pressure gauge 40 includes a color

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coded dial face 106 capable of indicating safe operation of the wheel hub (see column 6, lines 27-39).

The pressure measuring device 40 also includes a conduit 44 capable of being received within a through bore in a hubcap, thus fluidly coupling the gauge 40 to the closed air space within the wheel hub.

Therefore from this teaching, it would have been obvious to one of ordinary skill at the time of the invention to provide the pressurized wheel hub of Fox with a pressure measuring device as set forth by Hunt et al for the purpose of alerting an operator to the amount of pressurized air within the pressurized wheel hub and determining whether or not a pressure leak has occurred.

Terminal Disclaimer

9. The terminal disclaimer filed on 19 October 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending application 10/376,756 has been reviewed and is NOT accepted.

a. The person who signed the terminal disclaimer is not recognized as an officer of the assignee, and he/she has not been established as being authorized to act on behalf of the assignee. See MPEP § 324.

10. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

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Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1, 2, and 3-4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3, 2, and 5-6 of copending Application No. 10/376,756. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims contain all of the limitations of the claims of the copending Application but in slightly different terminology. Therefore, it is obvious that the applicant is claiming the same invention in different terms.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

13. Applicant's arguments with respect to claims 1-7, and 9-12 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show pressurized wheel hub assemblies connected to sources of pressurized air. For example, Hurrell, II shows a wheel hub of the type described above.


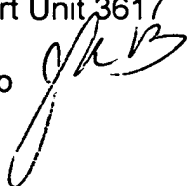
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger
Examiner
Art Unit 3617

jrb



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